PATENT COOPERATION TREATY PCT

INTERNATIONALSEARCHREPORT

(PCT Article 18 and Rules 43 and 44)

Applicant's or agent's file reference R04316PCT	FOR FURTHER ACTION	as well as, where applicable, item 5 below.		
International application No.	International filing date(day/month/y	ear) (Earliest) Priority Date (day/month/year) 01.03.2004		
PCT/JP2005/003827	01.03.2005	01.03.2004		
Applicant RICOH COMPANY, LTD.				
to Article 18. A copy is being transmitted This international search report consists	to the International Bureau.	Authority and is transmitted to the applicant according this report.		
language in which it was filed, the international sear this Authority (Rule 2	unless otherwise indicated under this ite ch was carried out on the basis of a trai 23.1(b)).	nslation of the international application fullished to		
b. With regard to any nucleon	ide and/or amino acid sequence disc	losed in the international application, see Box No. I.		
2. Certain claims were foun	d unsearchable (See Box II).	·		
3. Unity of invention is lack	ing (See Box III).			
4. With regard to the title,				
	ibmitted by the applicant.			
the text has been established	shed by this Authority to read as foll	ows:		
		•		
5. With regard to the abstract,				
the text is enproved as sul	omitted by the applicant.			
the text has been establis may, within one month fi	hed, according to Rule 38.2(b), by thi rom the date of mailing of this internat	s Authority as it appears in Box No. IV. The applicant ional search report, submit comments to this Authority.		
6. With regard to the drawings,	•			
a. the figure of the drawings to b	e published with the abstract is Figu	are No1		
as suggested by the				
as selected by this Authority, because the applicant failed to suggest a figure.				
as selected by this	Authority, because this figure better cha	aracterizes the invention.		
b. none of the figures is to	be published with the abstract.			

INTERNATIONALSEARCHREPORT

International application No. PCT/JP2005/003827

CLASSIFICATION OF SUBJECT MATTER

Int.Cl. H02J7/00, H01M10/44

According to International Patent Classification (IPC) or to both national classification and IPC

FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

Int.Cl. 7 H02J7/00, H01M10/44

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Published examined utility model applications of Japan 1922-1996
Published unexamined utility model applications of Japan 1971-2005
Registered utility model specifications of Japan 1996-2005
Published registered utility model applications of Japan 1994-2005

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

C. DOCUM	DOCUMENTS CONSIDERED TO BE RELEVANT	

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	JP 10-225001 A(MITSUBISHI ELECTRIC CO.,LTD.) 1998.08.21, [0008]-[0016], Fig. 1,2(no family)	1,3,10
Y		4-8
Y	JP 2002-010505 A(FUJI ELECTRIC CO.,LTD.) 2002.01.11, [0035]-[0038], Fig. 4(no family)	4-8
Y	JP 2003-348763 A(MITSUMIELECTRIC CO.,LTD.) 2003.12.05, [0006]-[0010], Fig. 1, 2(no family)	4-8

Ľ	Further documents are listed in the continuation of Box C.	ſ	See patent family annex.
* "A" "E" "L" "O" "P"	Special categories of cited documents: document defining the general state of the art which is not considered to be of particular relevance earlier application or patent but published on or after the inter- national filing date document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified) document referring to an oral disclosure, use, exhibition or other means document published prior to the international filing date but later than the priority date claimed	"X"	later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art document member of the same patent family
Date of the actual completion of the international search 08.06.2005		Date of mailing of the international search report 21.6.2005	
Name and mailing address of the ISA/JP Japan Patent Office 3-4-3, Kasumigaseki, Chiyoda-ku, Tokyo 100-8915, Japan		ISA	horized officer AO YOSHIMURA ephone No. +81-3-3581-1101 Ext. 3568